

Access to higher education

Higher education provides a wide range of individual and social benefits. Access to 4-year institutions involves academic preparation, application, admission, and enrollment. Examining the elements of college access and enrollment relative to race/ethnicity and family income provides an important indicator of the educational opportunities available to high school graduates.

- Eighty-six percent of high school graduates from high income families were academically qualified for admission at a higher education institution, compared to 68 percent of middle income and 53 percent of low income graduates. High income students were twice as likely as middle income students and four times as likely as low income students to be very highly qualified for college admission (see supplemental table 8-1).
- About half of minority high school graduates were qualified for college admission, with the exception of Asian/Pacific Islanders (73 percent), while 68 percent of white high school graduates were qualified (see supplemental table 8-1).
- Among college-qualified high school graduates, there was a positive relationship between family income and each of the following access-related attitudes and behaviors: expecting to complete a bachelor's degree, planning to enroll at a 4-year institution after high school, taking steps toward admission, gaining admission, and enrolling at a 4-year institution.
- College-qualified Hispanic high school graduates were less likely than qualified white, black, and Asian/Pacific Islander graduates to take steps toward college admission or to enroll in a 4-year institution after high school. However, qualified black students did so at comparable rates to qualified white students.
- Among qualified students who took steps toward college admission, low and middle income students were equally likely to be accepted at a 4-year institution and to enroll. High income students were accepted and enrolled at higher rates than low or middle income students (see supplemental table 8-2).

Percentage of college-qualified¹ 1992 high school graduates who expected to earn a bachelor's degree, planned to attend a 4-year institution, took steps toward admission, and were accepted at a 4-year institution, and percentage distribution according to postsecondary attendance by 1994, by race/ethnicity and family income

Race/ethnicity and family income	Expected a bachelor's degree	Planned to attend a 4-year institution	Took steps ² toward admission	Accepted at a 4-year institution	Postsecondary attendance by 1994 ³			
					Any 4-year institution	Public 2-year college	Other less-than- 4-year	Did not attend
Total	83.3	76.2	72.6	68.6	62.0	22.7	2.9	12.3
Race/ethnicity								
White	83.4	76.2	73.2	69.3	62.9	22.8	3.0	11.4
Black	82.7	79.0	74.4	70.0	64.2	14.5	3.2	18.1
Hispanic	78.3	69.2	61.5	57.6	49.2	29.7	3.4	17.8
Asian/Pacific Islander	89.9	84.4	80.1	75.1	68.1	22.3	1.7	7.8
American Indian/Alaskan Native	81.3	59.0	51.0	42.6	37.2	31.1	1.9	29.9
Family income								
Low (less than \$25,000)	74.2	68.6	61.5	59.0	52.2	21.2	4.3	22.3
Middle (\$25,000–74,999)	84.4	76.3	73.3	68.8	61.7	25.2	3.1	10.1
High (\$75,000 or more)	95.5	91.2	90.7	88.5	83.1	11.9	1.4	3.6

¹ Four-year college qualification index based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT and ACT scores, and curricular rigor. See the supplemental note to this indicator for further discussion.

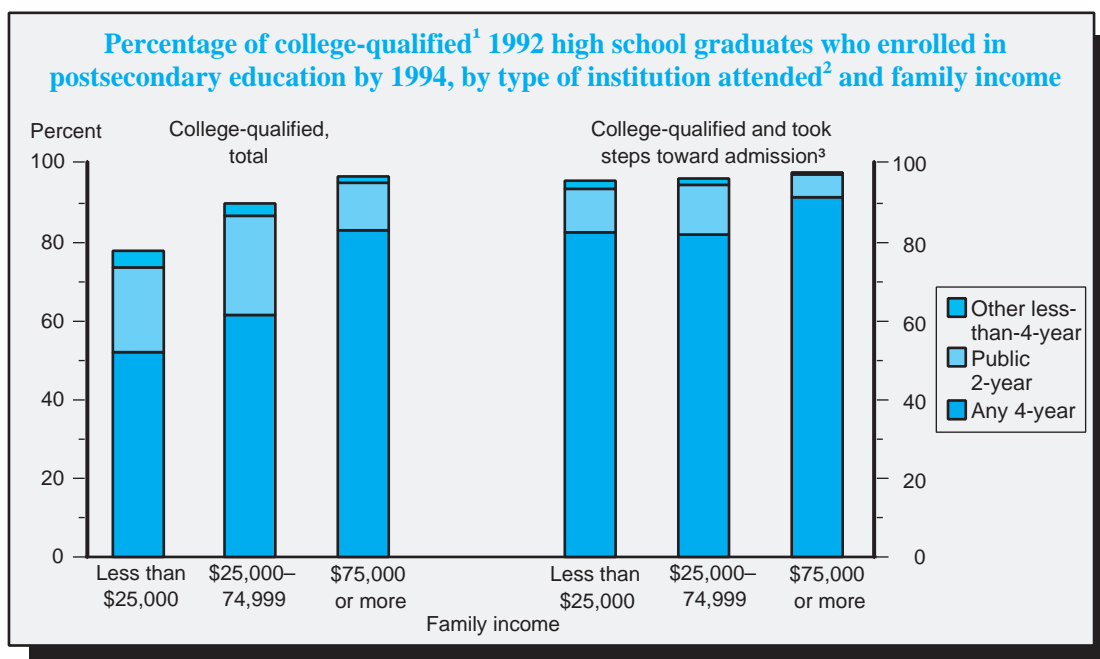
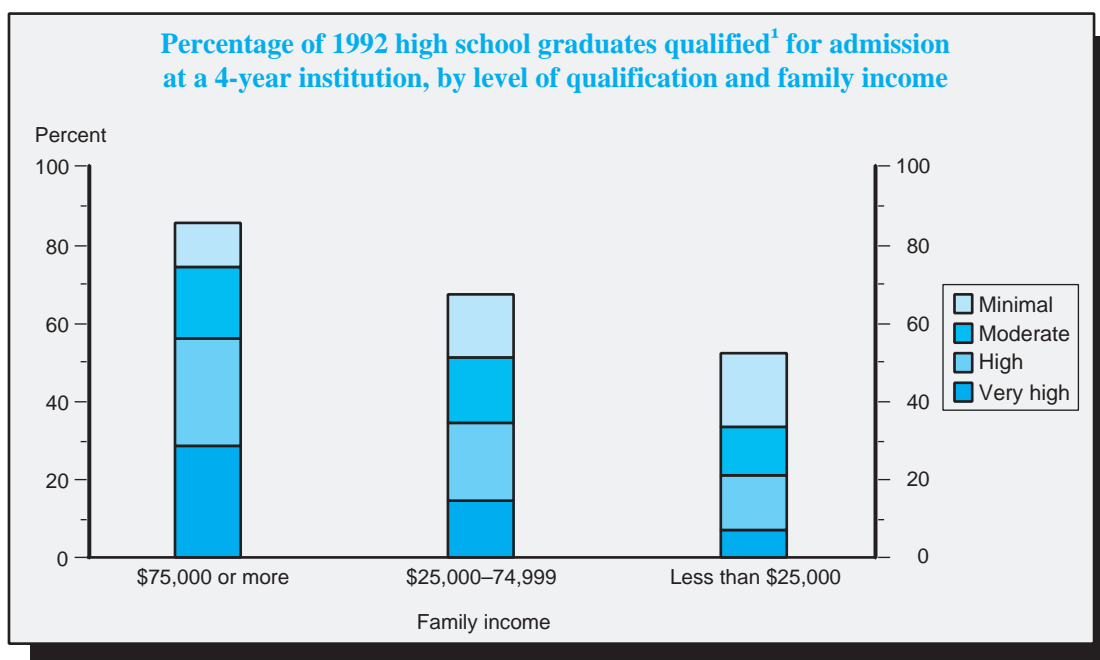
² Took a college entrance examination (SAT or ACT) and applied for admission to a 4-year institution.

³ First institution attended, if any.

NOTE: Details may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Third Follow-up (1994).

Access of 1992 high school graduates to higher education



¹ Four-year college qualification index based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT and ACT scores, and curricular rigor. See the supplemental note to this indicator for further discussion.

² First institution attended, if any.

³ Took a college entrance examination (SAT or ACT) and applied for admission to a 4-year institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Third Follow-up (1994).

Table 8-1 Percentage distribution of 1992 high school graduates qualified for admission at a 4-year institution, by race/ethnicity and family income: 1992–94

Race/ethnicity and family income	Marginally or unqualified	College-qualified*				
		Total	Minimally	Moderately	Highly	Very highly
Total	35.5	64.5	16.6	15.9	18.2	13.8
Race/ethnicity						
White	31.9	68.2	16.1	16.6	20.3	15.2
Black	53.1	46.9	16.7	14.0	9.9	6.3
Hispanic	47.0	53.0	20.7	13.6	10.8	7.9
Asian/Pacific Islander	27.3	72.7	14.6	15.0	20.2	23.0
American Indian/Alaskan Native	55.2	44.8	22.2	15.8	5.9	1.0
Family income						
Low (less than \$25,000)	47.5	52.5	18.7	12.8	13.6	7.3
Middle (\$25,000–74,999)	32.4	67.6	16.1	17.0	19.9	14.6
High (\$75,000 or more)	14.1	85.9	11.5	18.4	27.0	29.0

* Four-year college qualification index based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT and ACT scores, and curricular rigor. See the supplemental note to this indicator for a more detailed description.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Third Follow-up (1994).

NOTE: Details may not add to totals due to rounding.

Table 8-2 Percentage of college-qualified¹ 1992 high school graduates taking steps toward admission at a 4-year institution² who were accepted, and percentage distribution according to postsecondary attendance, by race/ethnicity and family income: 1992–94

Race/ethnicity and family income	Percentage accepted at a 4-year institution	Postsecondary attendance by 1994 ³			
		Any 4-year institution	Public 2-year college	Other less-than-4-year	Did not attend
Total	93.3	83.7	11.1	1.3	4.0
Race/ethnicity					
White	93.9	84.4	11.2	1.2	3.2
Black	90.3	81.5	8.5	2.6	7.4
Hispanic	90.9	77.2	13.0	1.0	8.9
Asian/Pacific Islander	93.6	84.4	11.1	0.3	4.2
American Indian/Alaskan Native	78.5	(⁴)	(⁴)	(⁴)	(⁴)
Family income					
Low (less than \$25,000)	93.5	82.5	11.2	1.7	4.6
Middle (\$25,000–74,999)	92.7	82.1	12.5	1.4	4.1
High (\$75,000 or more)	97.5	91.5	5.6	0.7	2.1

¹ Four-year college qualification index based on high school GPA, senior class rank, NELS 1992 aptitude test, SAT and ACT scores, and curricular rigor. See the supplemental note to this indicator for a more detailed description.

² Took a college entrance examination (SAT or ACT) and applied for admission to a 4-year institution.

³ First institution attended, if any. Includes students not accepted at a 4-year institution.

⁴ Too few sample observations for a reliable estimate.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Third Follow-up (1994).

Note to Indicator 8: Access to higher education

The college qualification index was developed for a recent NCES publication, *Access to Postsecondary Education for the 1992 High School Graduates* (NCES 98-105). The index measures a student's readiness to attend a 4-year college or university and uses up to five sources of information about a student's preparation: high school grade point average (GPA) in academic courses, senior class rank, scores on the NELS 1992 cognitive test battery, and ACT and SAT college entrance examination scores. Because admission standards and requirements vary widely among 4-year colleges and universities, the approach used was to examine the actual distribution of these five measures of academic aptitude and achievement among those graduating seniors who did attend a 4-year institution. Approximately half (45 percent) of the NELS graduating seniors had data available for four or five of the criteria: class rank, GPA, the NELS test, and ACT and SAT scores. For about one-third of the students, only three data sources were available because they lacked ACT or SAT scores. All of these students had NELS test scores, however. In order to identify as many students as possible who were potentially academically qualified to attend a 4-year institution, students were assigned the highest level of qualification yielded by any of the five criteria available.

Students were classified in a two-stage process. The initial classification was determined as follows:

- **Very highly qualified:** those whose highest value on any of the five criteria would put them among the top 10 percent of 4-year college students (specifically the NELS 1992 graduating seniors who enrolled in 4-year colleges and universities) for that criterion. Minimum values were GPA=3.7, class rank percentile=96, NELS test percentile=97, combined SAT=1250, composite ACT=28.
- **Highly qualified:** those whose highest value on any of the five criteria would put them among the top 25 percent of 4-year college students (but not the top 10 percent) for that criterion. Minimum values were GPA=3.6, class rank percentile=89, NELS test percentile=90, combined SAT=1110, composite ACT=25.

- **Moderately qualified:** those whose highest value on any of the five criteria would put them among the top 50 percent (but not the top 25 percent, i.e., in the second quartile) of 4-year college students for that criterion. Minimum values were GPA=3.2, class rank percentile=75, NELS test percentile=76, combined SAT=960, composite ACT=22.
- **Minimally qualified:** those whose highest value on any of the five criteria would put them among the top 75 percent (but not the top 50 percent, i.e., in the third quartile) of 4-year college students for that criterion. Minimum values were GPA=2.7, class rank percentile=54, NELS test percentile=56, combined SAT=820, composite ACT=19.
- **Marginally or not qualified:** those who had no value on any criterion that would put them among the top 75 percent of 4-year college students (i.e., all values were in the lowest quartile). In addition, those in vocational programs (according to their high school transcript) were classified as not college qualified.*

Next, some adjustments were made for programs of rigorous academic coursework, defined as including at least 4 years of English; 3 years each of science, mathematics, and social studies; and 2 years of a foreign language. Those who had taken a program of rigorous academic courses were moved up into the next highest level of qualification, and those in the "very highly qualified" category who had not taken the rigorous academic coursework were moved down into the "highly qualified" category.

Students were identified as "college qualified" if they were at least minimally qualified according to this index. However, it is important to recognize that by definition, the "marginally or not qualified" category includes students who enrolled at a 4-year institution. Admission standards vary widely and admission may be based on factors other than academic preparation (for example, some public 4-year institutions are open to any in-state high school graduate).

* This procedure affected the classification of less than 1 percent of students, because very few students in vocational programs met any of the criteria for a higher classification.

Table S8 **Standard errors for the text table in *Indicator 8***

Race/ethnicity and family income	Expected a bachelor's degree	Planned to attend a 4-year institution	Took steps toward admission	Accepted at a 4-year institution	Postsecondary attendance by 1994			
					Any 4-year institution	Public 2-year college	Other less-than- 4-year	Did not attend
Total	0.7	0.8	0.9	0.9	1.0	0.9	0.3	0.6
Race/ethnicity								
White	0.8	0.9	1.0	1.1	1.2	1.1	0.4	0.6
Black	2.4	2.6	2.8	3.0	3.3	2.3	0.8	2.7
Hispanic	2.9	2.7	2.7	3.1	3.0	2.7	0.7	2.1
Asian/Pacific Islander	2.0	2.3	2.4	2.6	2.8	2.6	0.6	1.6
American Indian/Alaskan Native	6.1	11.4	9.9	9.2	9.3	11.9	1.9	8.3
Family income								
Low (less than \$25,000)	1.7	1.7	1.8	1.8	1.8	1.5	0.7	1.6
Middle (\$25,000–74,999)	0.9	1.1	1.1	1.1	1.3	1.2	0.5	0.7
High (\$75,000 or more)	0.8	1.1	1.0	1.1	1.5	1.4	0.4	0.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88), Third Follow-up (1994).